

Who needs audiological testing?



Curriculum Vitae

Gail obtained her degree in BA (Speech & Hearing Therapy) from the University of the Witwatersrand in 1976. She worked in the Groote Schuur Logopaedics Department from 1977-1979, during which time she also lectured part-time at UCT. In 1979 she returned to Johannesburg, and while working at Baragwanath Hospital, her focus of interest started to shift from speech therapy to audiology. In 1981 she joined a private audiology practice and became a partner in that practice in 1985. In 1994 she and her son moved back to the sea and mountains of the Cape where she presently has a practice in Constantiaberg Medi-Clinic in Plumstead.

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Summary

With so many pathologies to deal with, the GP can easily miss a hearing problem, especially in a quiet consulting room with no background noises. Different age groups present differently and this aspect is dealt with in this article. Patient reports are given to illustrate it. As early detection is so important, GPs need to be more aware of the at-risk patient, and should refer, even if many people are then tested who do not have a hearing problem.

Who needs audiological testing?

This question becomes particularly relevant considering that a general practitioner has a wide range of many different pathologies to deal with. Hearing problems are probably one of the more difficult to identify because they are frequently invisible.

Different age groups present different diagnostic problems.

Babies

A baby with a mild to moderate hearing loss will present with a pattern of inconsistent response to sound, particularly if the loss does not affect all frequencies. Speech development will tend to be delayed and will contain articulation errors. The confusion here is that children with normal hearing often respond inconsistently to sound (particularly commands from parents!) and that speech and language delays can be caused by factors other than hearing loss.

Children

Children with chronic or intermittent middle ear pathology are expected to have fluctuations in their hearing acuity. The otitis which is visible on exami-

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nation may be treated but the effect on hearing – which has implications for the child's life and schooling – is frequently not addressed. Furthermore, the assumption that reduced hearing is the result of otitis can prevent the diagnosis of a co-existent sensory-neural hearing loss.

Patient report

A six-year-old boy, C Van C, had a history of recurrent tonsillitis and otitis and had had grommets inserted. He had previously attended speech therapy to improve poor articulation. Mrs C Van C requested assessment because she felt her son was still not hearing well and articulation was still poor despite constant management of the middle ear pathology. Audiological assessment showed bilateral mid to moderate sensory neural loss for which amplification was recommended.

Adults

In the adult group one would expect the problem of diagnosis to be reduced. However, hearing losses still vary in degree, seldom affecting all sound frequencies equally and often having a slow rate of progression. An adult with a hearing problem will thus notice that she hears some environmental sounds as well as other people do and will wonder why she can't understand conversational speech. She would frequently blame others for 'not speaking clearly'.

A high frequency hearing loss is often interpreted as a blocked feeling in the ear and the general practitioner may be asked to look for wax in the ear canal. If no wax is found, further assessment may be indicated.

The effect of a hearing loss varies depending on the level of background noise, and will be least noticeable in the quiet environment which typifies most doctors' consulting rooms. Ideally, doctors should try to determine

whether the patient experiences difficulties in communicating in other contexts.

Patient report

Mr M, an active 50-year-old businessman, consulted an ear, nose and throat surgeon due to his persistent feeling of having a 'blocked' right ear with recent associated ringing (tinnitus) in that ear. On examination there was no evidence of eustacian tube malfunction or middle ear pathology. Audiological findings displayed a mild right sensory-neural hearing loss with 50% roll-over occurring on the speech audiogram. This 'roll-over' led to Mr M being referred for an MRI scan, and a small acoustic-neuroma was identified.

The benefit of early evaluation in the case of Mr M was that the symptoms and damage, due to the neuroma, were still mild and because of the early detection he had access to non-invasive proton beam therapy. Thus the impact of the lesion on his health and lifestyle was minimised.

The elderly

In older people the hearing loss is often not noticed, or not mentioned. This may be due to a number of factors:

- The slow progression of the hearing loss.
- Frequently a spouse and/or friends also have hearing losses.
- The presence of elements of senility and memory loss.
- The desire not to be a burden and the acceptance that 'old people don't hear well'.

If a doctor suspects that there is a hearing loss, assessment is recommended.

Patient report

Mrs P was on holiday with a friend who had recently been successfully fitted

GPs find it difficult to identify hearing problems.

The otitis gets treated – but not the effect on hearing.

An adult with a hearing problem frequently blames others for not speaking clearly.

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with a hearing aid. This prompted Mrs P to undergo audiological evaluation. She was found to have bilateral sensory-neural loss and was fitted with a hearing aid. She reported extreme satisfaction with her new found ability to hear and to communicate with family and friends. Sadly, she passed away three months later. In view of the long standing nature of her hearing loss, it is a pity that she did not have the enhanced life quality for a longer period of time.

Who does one refer for diagnosis?

In *babies* and young children auditory perceptual and speech and language development depends on good, if not excellent hearing acuity. It is therefore imperative to assess any child who may have a hearing problem. An audiologist's job is to diagnose a hearing loss, ie, to sift through the at-risk group of people who may have a hearing loss, to identify those with a problem and to determine the nature of that problem. Thus the baby with poor response to sound, the toddler with delayed speech and the child with unexplained temper tantrums all need assessment to exclude hearing problems.

The *scholar* who does not concentrate, who can't learn to spell, who is per-

ceived as a bright child but who performs poorly academically, needs to be assessed.

The *adult* who finds herself nodding and then realises that the response was inappropriate, who prefers not to socialise because 'people don't speak clearly' and who experiences tension headaches after socialising, needs to be assessed. Those who present with tinnitus (noise in the ears), vertigo (dizziness) and those whose ears feel permanently blocked, also require assessment.

The *older* person's perception that hearing deteriorates with age, is correct, but there is much that can be done to reduce the effect of the impediment and to enhance quality of life. An unaided hearing loss may be misinterpreted as senility, and can certainly exaggerate symptoms of senility.

If referral for hearing assessment is made on as broad a basis as I have suggested, people will be tested who do not have a hearing problem. However, the alternative of leaving people unassessed, who will benefit from intervention, is, I feel, the poorer option. At very least, knowing what a problem is not, is a guide to knowing what the problem is!

Level of background noise is an important factor.

GPs' consulting rooms are often very quiet which makes it difficult to notice a hearing loss.

Early detection has tremendous benefits.

Refer – even if it means that many people are being tested who do not have a hearing problem.